

# **23<sup>rd</sup> REFORM Group Meeting 2019**

## **History of failure of Japan's climate and energy policy**

**Oct. 16, 2019**

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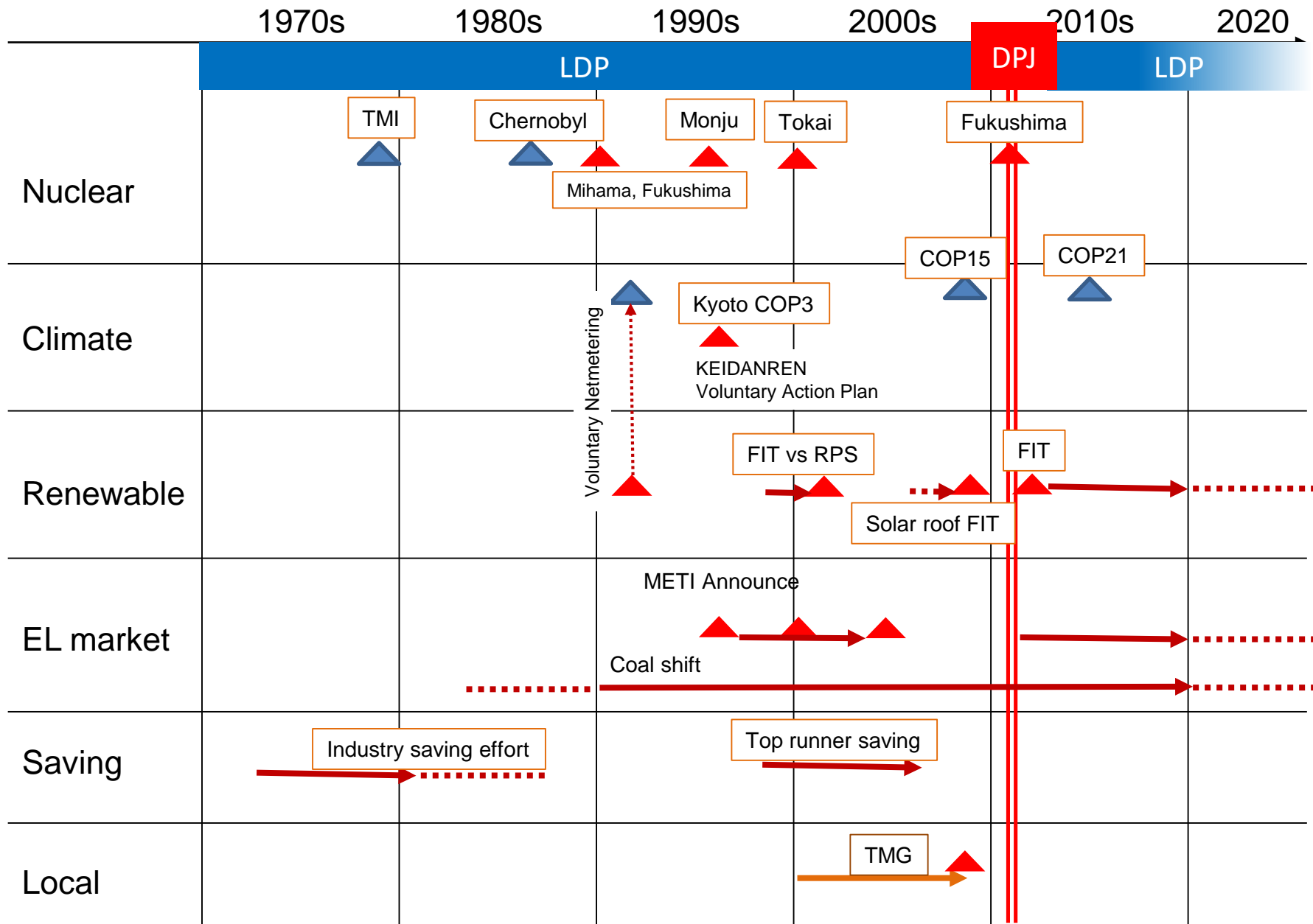
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# **1. Past Glory and Present Ignorance**



# Last ten years, international assessment of Japan's Climate Change Performance has been very low

## Climate Change Performance Index

2011	2012	2013	2014	2015	2016	2017	2018	2019
35/56	40/58	44/58	47/58	50/58	55/58	57/58	47/57	46/57

Source : <https://www.climate-change-performance-index.org/>

# G7 countries' governmental support for fossil fuels

## Scoring G7 progress in ending government support for fossil fuels

	FRANCE	GERMANY	CANADA	UK	ITALY	JAPAN	US
<b>Overall score and ranking</b>	<b>1st</b> 63/100	<b>2nd</b> 62/100	<b>3rd</b> 54/100	<b>4th</b> 47/100	<b>5th</b> 46/100	<b>6th</b> 44/100	<b>7th</b> 42/100
1. Transparency	<b>3rd</b> 50/100	<b>1st</b> 90/100	<b>6th</b> 25/100	<b>7th</b> 10/100	<b>3rd</b> 50/100	<b>5th</b> 30/100	<b>2nd</b> 70/100
2. Pledges and commitments	<b>1st</b> 83/100	<b>1st</b> 83/100	<b>4th</b> 75/100	<b>1st</b> 83/100	<b>5th</b> 58/100	<b>6th</b> 50/100	<b>7th</b> 25/100
3. Ending support for fossil fuel exploration	<b>1st</b> 63/100	<b>1st</b> 63/100	<b>3rd</b> 42/100	<b>4th</b> 38/100	<b>4th</b> 38/100	<b>7th</b> 29/100	<b>4th</b> 38/100
4. Ending support for coal mining	<b>1st</b> 75/100	<b>4th</b> 60/100	<b>1st</b> 75/100	<b>5th</b> 55/100	<b>1st</b> 75/100	<b>6th</b> 45/100	<b>7th</b> 20/100
5. Ending support for oil and gas production	<b>1st</b> 54/100	<b>1st</b> 54/100	<b>7th</b> 25/100	<b>3rd</b> 42/100	<b>3rd</b> 42/100	<b>5th</b> 38/100	<b>6th</b> 33/100
6. Ending support for fossil fuel-based power	<b>2nd</b> 64/100	<b>6th</b> 39/100	<b>1st</b> 71/100	<b>3rd</b> 50/100	<b>7th</b> 29/100	<b>4th</b> 46/100	<b>5th</b> 43/100
7. Ending support for fossil fuel use	<b>4th</b> 54/100	<b>6th</b> 46/100	<b>2nd</b> 67/100	<b>5th</b> 50/100	<b>7th</b> 33/100	<b>1st</b> 71/100	<b>2nd</b> 67/100

Source : Whitley et al. (2018)

# Latest G7 coal score card



Source :  
Burrows  
and  
Littlecott  
(2019)

## **2. Coal, Nuclear and Renewables: Accelerator and Brake**



# **Fifth basic energy plan adopted in July 2018**

- **It says “Make renewable energy Japan’s main source of power by 2050”**
- **But, (unambitious) 2030 Energy mix has not changed at all**
- **Nuclear and coal continue to be acknowledged as the significant “base load power” sources**

# 50 new coal-fired power plants construction plan after 2012



Red: operation **12**

Orange: under

Construction **15**

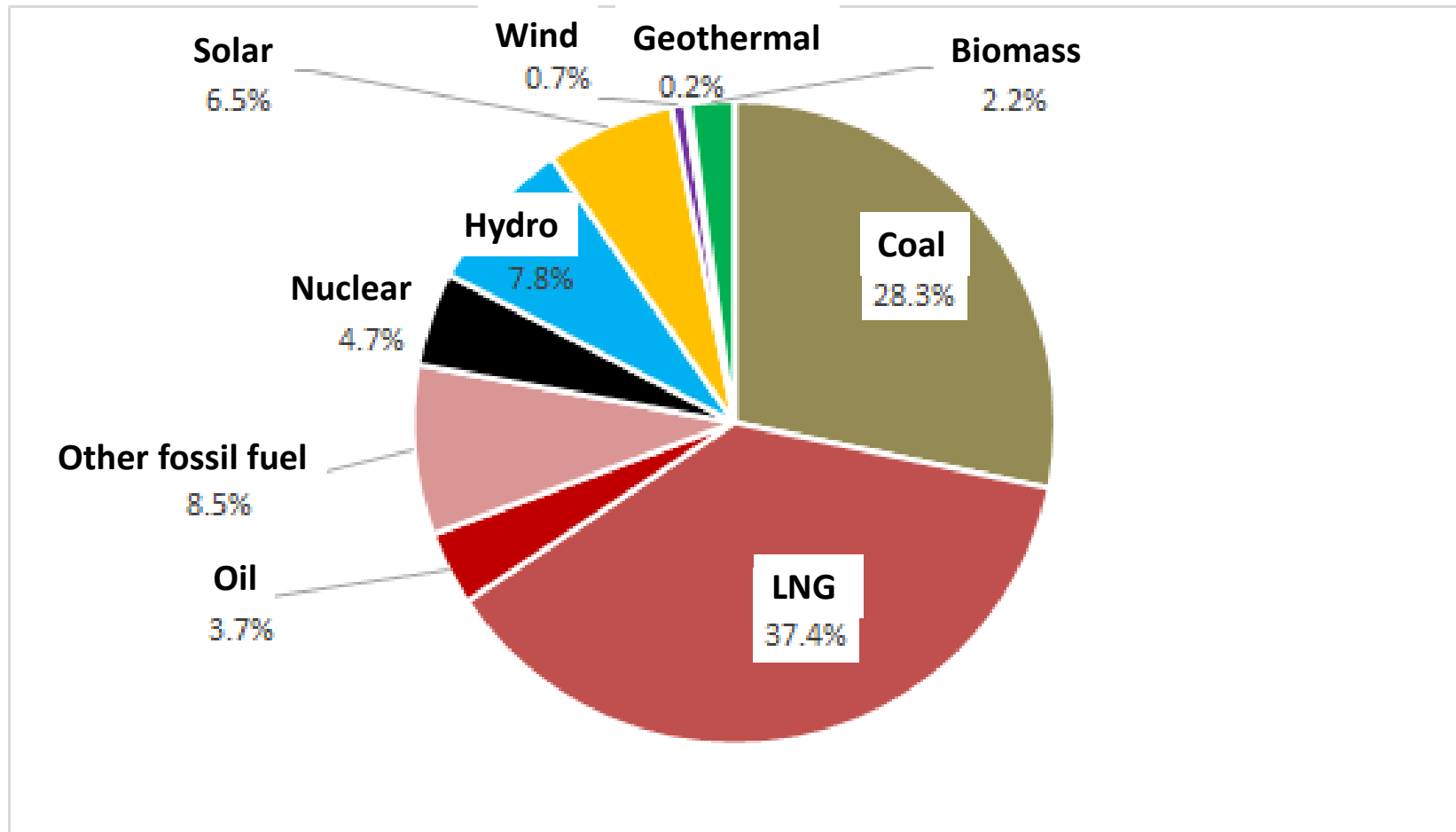
Yellow: under EIA **8**

Black: planning **2**

Green: cancelled **13**

(as of 2019 March 1)

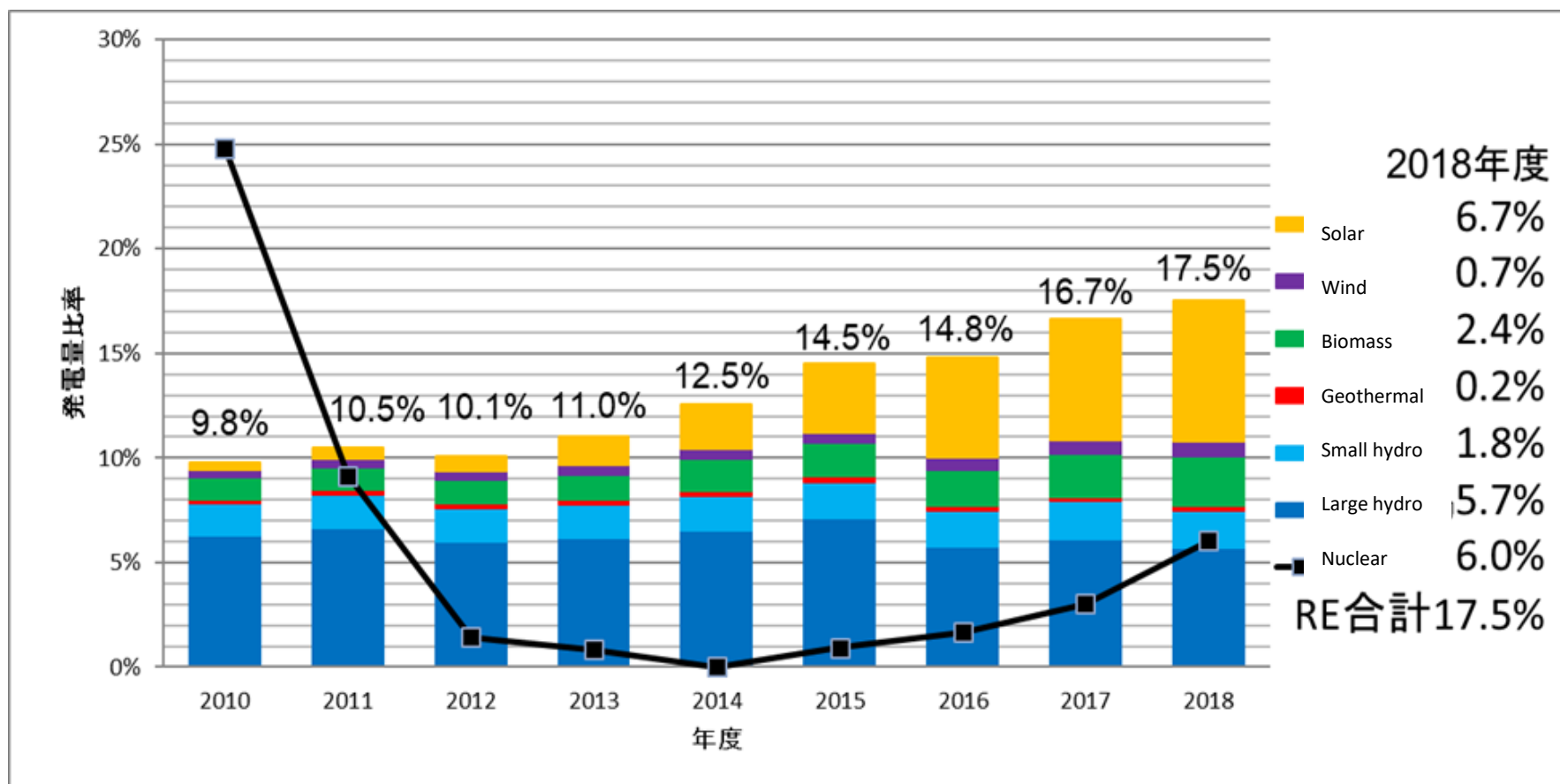
# Current energy-mix in Japan (2018)



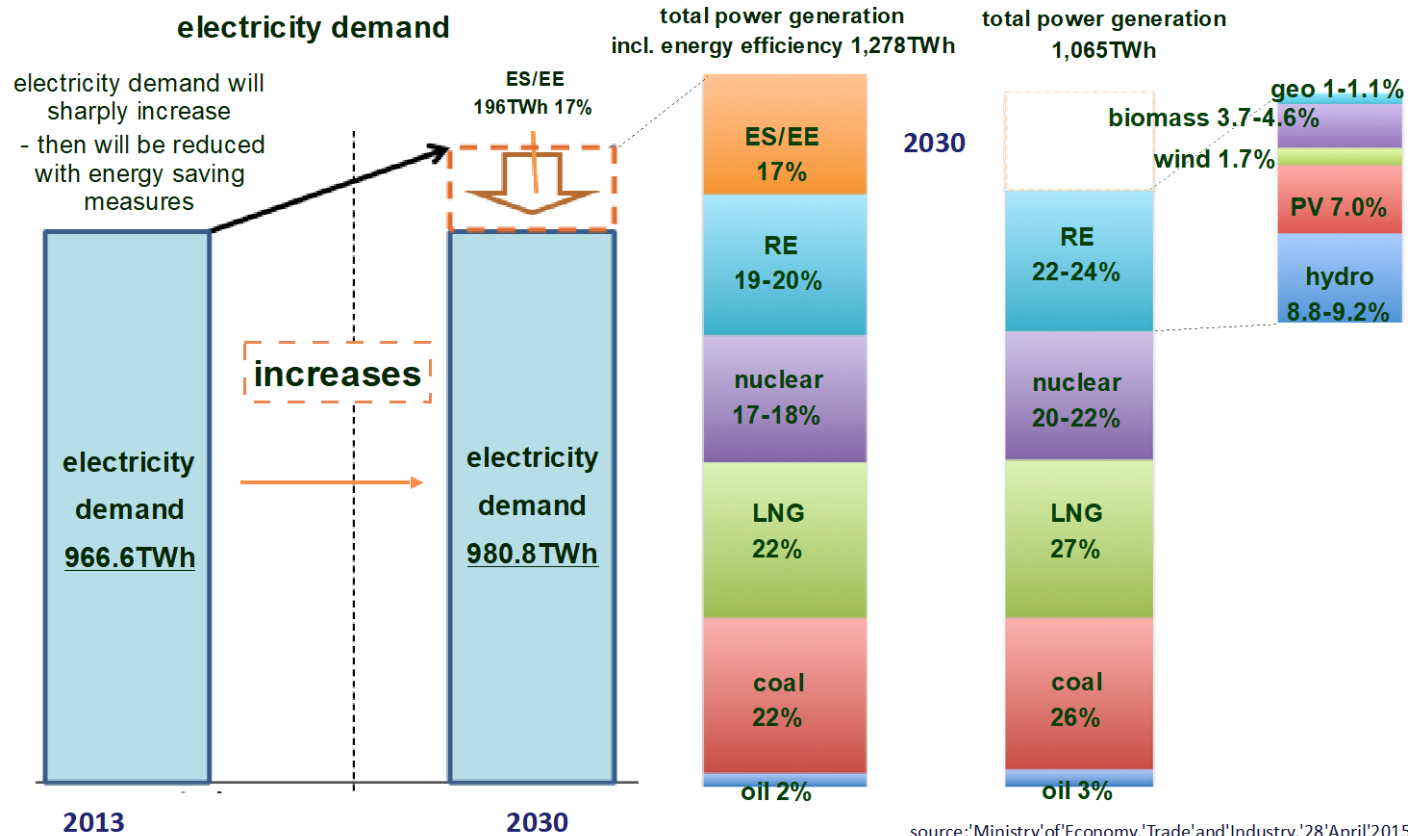
Source: ISEP 2019

# Increase of the renewable energy in Japan

Initial “generous” FIT tariff has worked very well

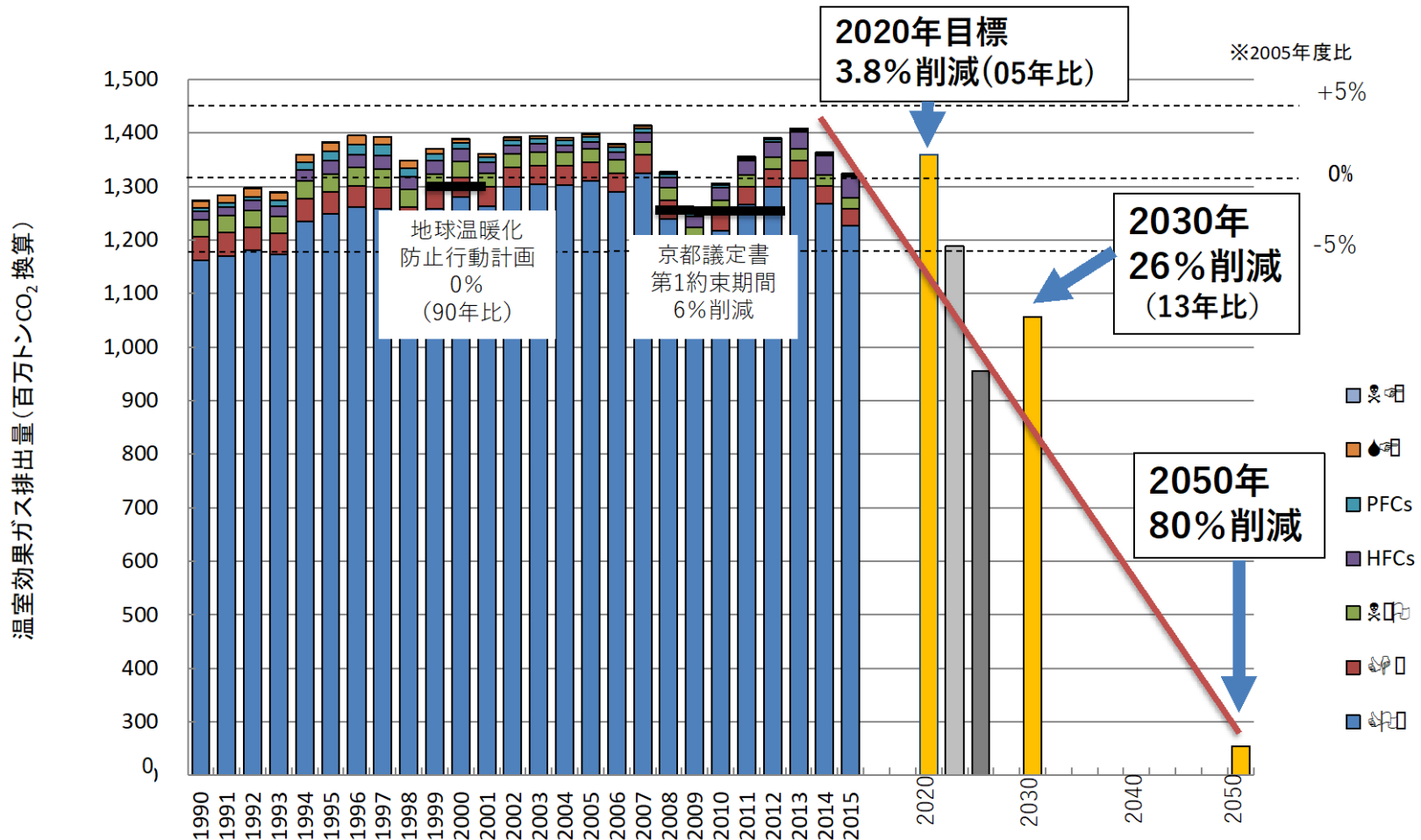


# Planned energy mix in 2030 by the current Japanese Government



Unrealistic on nuclear and negative on renewables

# Contradiction between the short-term target and the long-term target



Source: Hirata Kimiko, Kiko network

# **Policies which may have a potential to work against the expansion of the renewable energies**

- **Diminishment of FIT(→bidding system)**
- **Introduction of the Capacity market, Base-load market, Non-fossil fuel energy certificate market, etc.**
- **Non-priority connection to the grid is still a significant problem**

# **3. Twisted: Nuclear and Climate skeptics**



# **Nuclear power: low agenda**

- **METI and Industry lobbying group still argue that replacement/new construction is necessary for de-carbonization**
- **However, the public opinion is still not so positive on the nuclear power**
- **Therefore, the current administration is keeping a low profile and it tries not to make it as a contentious issue in the national election**

# Wake not a sleeping lion

- “Long-term energy supply and demand outlook” made every 3-4 years by METI decides everything!
- Latest one with the calculation of the power generation costs was made in 2015 with old data
- Now METI is reluctant to make a new calculation with updated data
- Anti-ruling parties are weak in many ways

# Climate change and nuclear power

- **People who are not so positive on climate change mitigation action in reality say “Nuclear is necessary for combating climate change” for the sake of promoting nuclear power**
- **Therefore, quite a few anti-nuclear people became climate skeptics**

# **“Myths” are still alive**

- **Many people still believe that “nuclear power is cheap” “Renewable is expensive” “Japan’s energy efficiency is highest in the world”**
- **For them, it is a trade off between “Life or Money” “Nuclear or Coal”**
- **So energy issue cannot be a big issue in the election**

# **4. Green New Deal Japanese Version**

# 原発ゼロ・ エネルギー 転換戦略

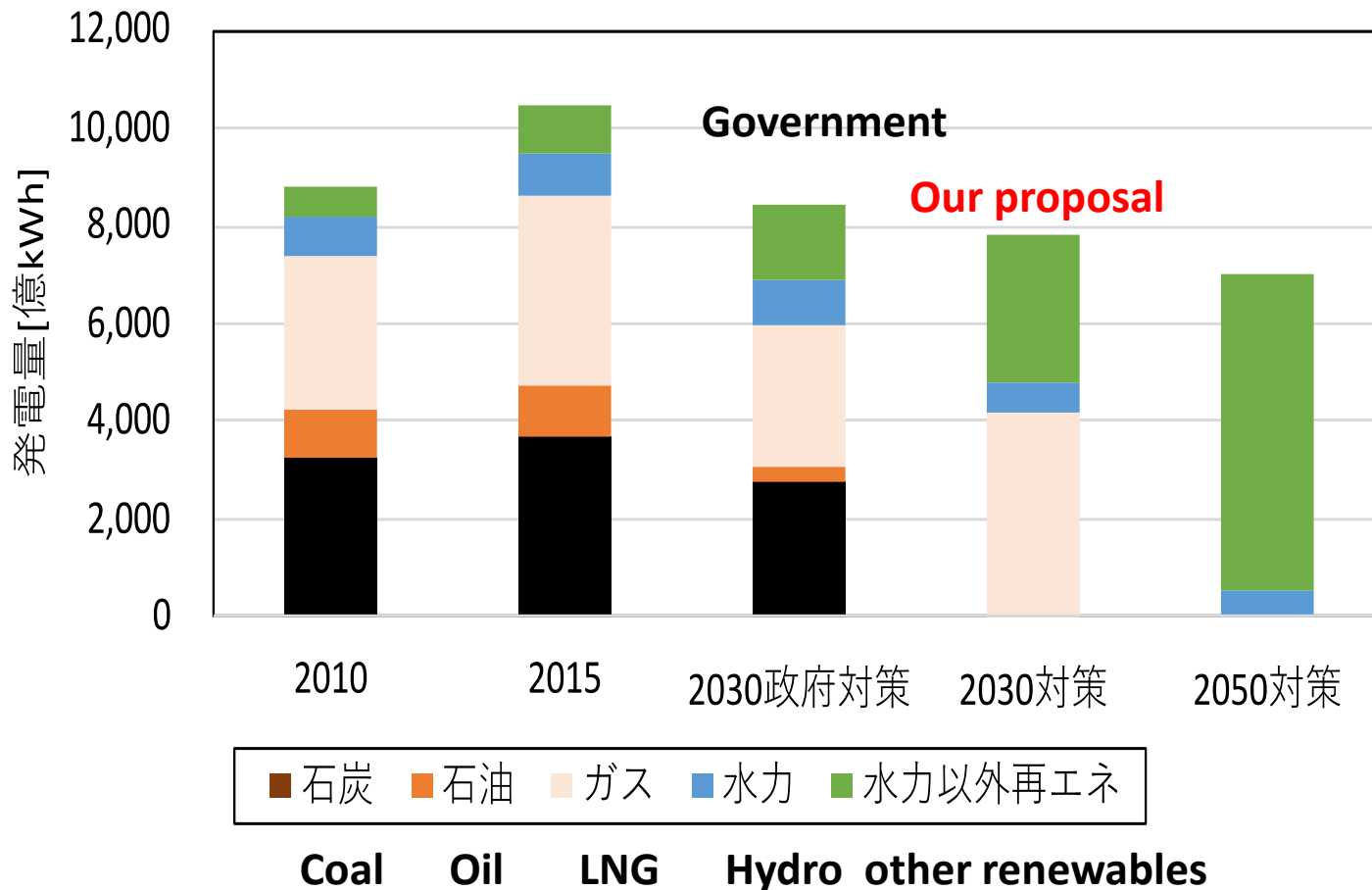
日本経済再生のための  
エネルギー民主主義の確立へ

[https://www.  
etffjp.group/](https://www.etffjp.group/)

**Zero Nuke, Energy Transition Strategy: Energy  
Democracy for Revitalizing the Japanese Economy**

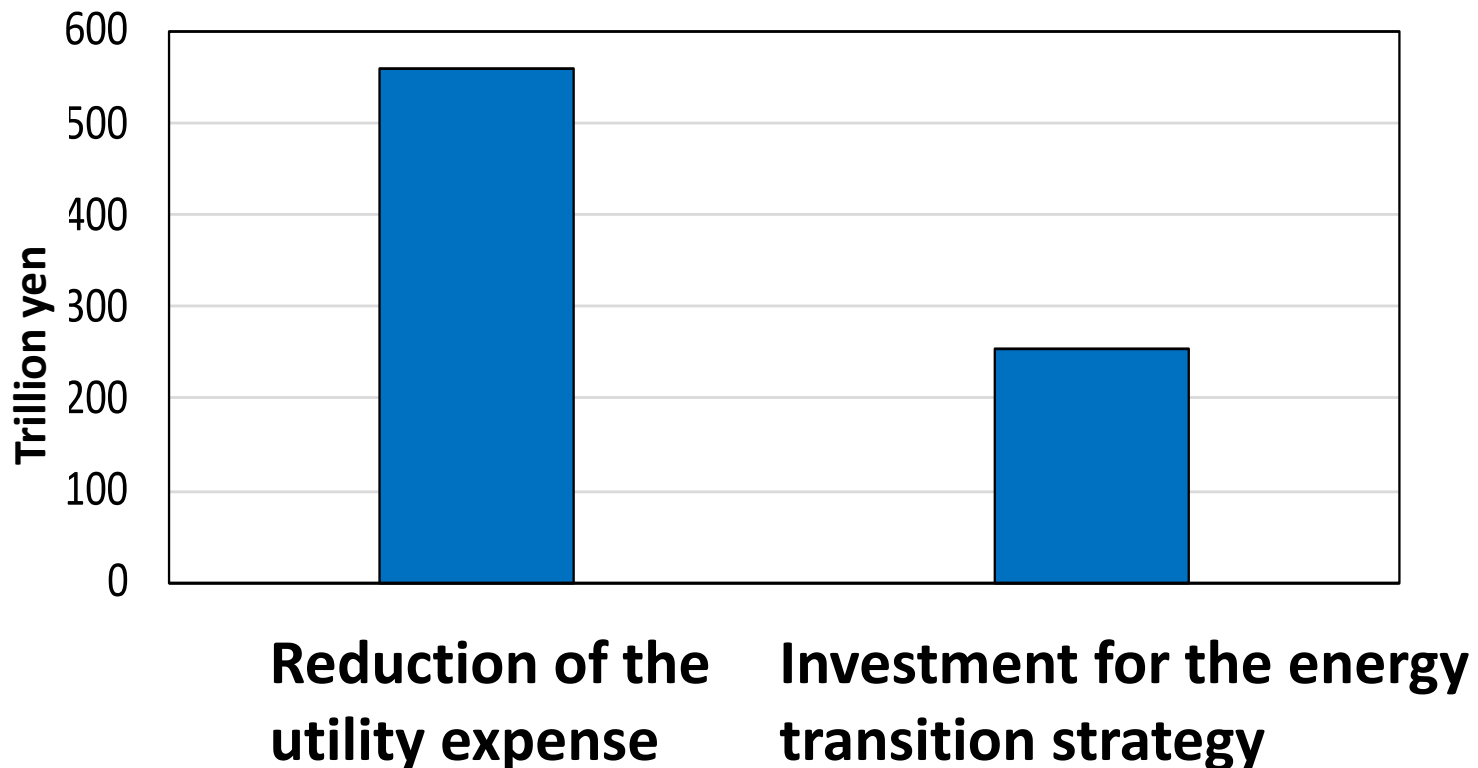
# Our energy mix target (proposal) in 2030

Energy mix in 2030 and 2050



# Investment needed for the energy transition is much smaller than the reduction of utility expense

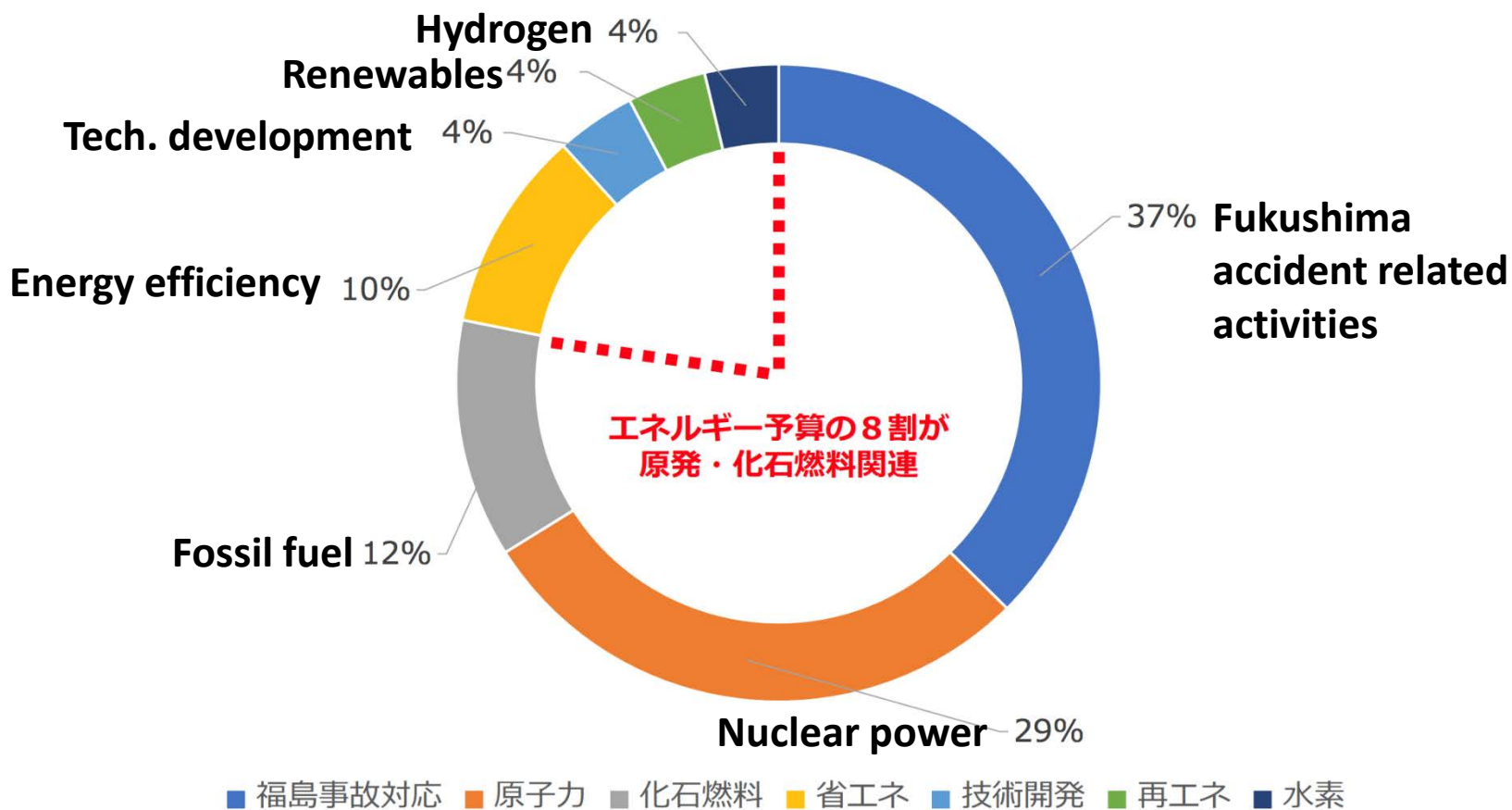
Accumulated (2018~2050)





# Financial resource exists

## Energy related budget of Japan (2019)



Source : Tanaka (2019)

# **Nuclear and coal in Japan: Employment and GDP contribution are very small**

- **Employment of the nuclear industry is about 50 thousands**
- **Employment of the coal power station is about 3 thousands (GDP contribution is 0.04%)**
- **Employment of the renewable energy industry is about 280 thousands**

# Good news!

- **Current result of the bidding system in Japan clarifies lowering of the cost for large-scale PV projects**
- **Average contract price was 12.98 yen/kWh and lowest one is 10.50 yen/kWh (Sep. 2019)**
- **They are still higher than European and other Asian one but they show continuous decrease even in Japan**

# 5. Conclusion

# Cautiously optimistic...

- In general, people do not know much about energy and climate change policy
- Current government is stepping on the accelerator and brake at the same time
- Many people still believe nuclear is necessary for combating climate change
- We are doing our best to make the Japanese version of GND as a common energy policy for anti-ruling parties for coming election

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